ELECTRONICS AND COMMUNICATION DEPARTMENT

IMAGE PROCESSING AND APPLICATIONS WORKSHOP

Date: 04/04/2015

Organizers:

Electronics and Communication Engineering Department, SCET

IEEE Signal Processing Society Chapter, IEEE Gujarat Section

IEEE SCET Student Branch, SCET

Coordinators:

Dr. Chirag N. Paunwala, Associate Professor, SCET

Dr. Maulin M. Joshi, Professor, SCET

Miss. Aarohi Vora, Lecturer, SCET

Volunteers:

Mr. Priyank Parmar, Chair, IEEE SCET SB

Mr. Aksh Patel, Vice-Chair, IEEE SCET SB

Miss. Dhara Marvadi, Treasurer, IEEE SCET SB

Mr. Dhaval Gajjar, IEEE Student Member

Expert Faculties:

- (1) Dr. Suman Mitra, Professor, DA-IICT, Gandhinagar
- (2) Dr. Hiren Mewada, Associate Professor, EC Department, CSPIT, Charusat, Changa.
- (3) Dr. Mita Parikh, HOD, IT Dept., SCET

- (4) Dr. Chirag N. Paunwala, Associate Professor, Electronics and communication Engineering Department, SCET, Surat
- (5) Miss. Aarohi Vora, Lecturer, Electronics and communication Engineering Department, SCET, Surat

Brief details:

Workshop was scheduled at Audio Video room, Electronics and Communication Department, SCET. Around 40 enthusiastic participants (faculties and research scholars) were enrolled for the workshop from different colleges around Gujarat. Workshop consists of two technical sessions on recent trends followed by hands on session on different applications and penal discussion.

First session was conducted by **Dr. Suman Mitra**, DA-IICT, about "**Dimensionality Reduction for Visual Big Data: Recent Techniques**". The session gave good depth about the techniques and research work carried out in the field. The session has been given idea about mathematical modeling and analysis techniques for dimension reduction.

Second session was conducted by **Dr. Hiren Mewada**, CSPIT, Charusat, Changa, about "**Multiscale Geometric Representation**". The main focus of the lecture is how different wavelet technique can be applied on image and comparison of performance of different wavelet methods. The depth knowledge about Nonsubsampled contourlet transform has been provided and it gave idea of basic research methodology in NSCT transform and its various application has also been discussed.

A hand on session was conducted by Dr. Mita Parikh, HOD, IT Dept., "**Weka toolbox: Used for several Classifier Applications".** It is very useful data mining software which includes different classification, normalization and filtering techniques for big data or high dimensional data analysis.

Applications like "Biometric Applications for authentication" are discussed during lab session by Dr. Chirag Paunwala and Miss. Aarohi Vora; so that participants can further review and get motivation to use it for future use.

At the end of workshop, participant's feedbacks were collected that indicated they really enjoyed all technical sessions of the workshop.

